DOCUMENT RESUME

ED 286 175 CS 210 576

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TITLE The Impact of Central City Newspaper Market Structure on Suburban Newspaper Existence and Circulation.
PUB DATE Aug 87
NOTE 23p.; Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (70th, San Antonio, TX, August 1-4, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Competition; Media Research; Metropolitan Areas; *Newspapers; *Suburbs
IDENTIFIERS Joint Operating Agreements (Newspapers); *Market Analysis; Market Research; *Newspaper Circulation

ABSTRACT

A study examined the effect of market structure on suburban newspaper circulation and existence, specifically investigating whether the structure of the central city newspaper market influences the following: (1) the existence of a weekly or bi-weekly suburban newspaper; (2) the existence of a daily suburban newspaper; and (3) the circulation of weekly, bi-weekly or daily newspapers in suburban markets. Nine hundred suburban communities were sampled--300 randomly selected from each of the three different central market structures (monopoly markets, competitive markets, or joint operating agreement). Results indicated that the newspaper market structure of the central cities did not bar nor extensively influence either the existence of suburban newspapers or their circulation. Competitive central markets were positively related to suburban weekly paid circulation. In every instance population of the suburb, as an indicator of demand, was important to both the existence and circulation of suburban newspapers. Results suggest that entrepreneurial talent and the policy of the central city newspaper managements toward the suburbs may also be important factors in the existence of a suburban newspaper. (Tables of data and notes are attached.) (NKA)

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The Impact of Central City Newspaper Market Structure on Suburban Newspaper Existence and Circulation

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CS210576

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Although the newspaper industry has been marked by a gradual overall decline in the number of dailies and weeklies since the end of World War II, the segment called the suburban press has actually expanded. In 1980, the largest 175 metropolitan areas had about 3,000 suburban weeklies and dailies.[1] By 1986, 73 metropolitan areas had about 3,500 suburban weekly or daily newspapers.[2] The increase in suburban papers has contributed to the growth of competition between large metropolitan dailies and the smaller dailies, bi-weeklies and weeklies in the suburbs.[3] This intercity competition has been called "umbrella competition" by Rosse.[4] Compared to research into intracity competition and group ownership, few empirical studies have examined this growing area of the industry.[5] Yet, this umbrella competition is considered a threat to the survival of suburban newspapers by many smaller newspaper editors and publishers.[6]

Many factors influence the degree and effect of umbrella competition, but one area that has gained some attention is the market structure of the central city in a large metropolitan area. Two concepts define market structure--the number of firms and whether the product is homogeneous or heterogeneous.[7] Newspapers are heterogeneous because no two papers are perfect substitutes and newspaper editions vary from day to day. However, the number of firms in a central market does vary. Cities will have either one daily newspaper (referred to in this study as monopoly markets), two or three dailies (referred to as competitive markets), or a joint operating agreement, where two separately owned dailies combine all operations but the editorial staffs.[8]

A key issue is whether the number of newspaper firms in the central market has an impact on the suburban markets. This question draws attention especially when two newspapers file for a joint operating agreement under the Newspaper Preservation Act. Such an application is currently being considered for Detroit and has drawn criticism from some of the suburban newspapers managers who perceive this as a threat to their papers.[9] Similar criticisms are being voiced by suburban newspapers in a challenge of the joint operating agreement in San Francisco. Challenges will likely be raised repeatedly in the future as joint operating agreements in other metropolitan areas come due for renewal and the U.S. Justice Department is asked to decide whether agreements do indeed represent unfair competition for suburban newspapers. A major problem in these battles between joined papers, or those seeking to become joined, and the suburban newspapers is a scarcity of rigorous, generalizable research on the effects of central market structure on the suburban press. This study was designed to help fill the knowledge gap by determining if central market structure is related to the number and circulation of suburban weekly, bi-weekly and daily newspapers.

ECONOMIC THEORY

Competitive Market Structure

In economic terms, metropolitan areas where there are two or more competing dailies represent markets where the firms are acutely aware that any actions they take will cause a reaction by their competitors. In a true oligopoly, where firms are of comparable strength and provide products that are acceptable substitutes for each, some attempt normally will occur to seek

profit maximization through some type of collusive behavior.[10] In the case of competing daily newspapers, collusion might consist of behavior that maximizes profits and constructs barriers to entry by potential competitors.

In reality, these practices probably seldom, if ever, occur because competing newspapers are rarely of comparable strength and there is evidence that the products they produce are not acceptable substitutes for all readers in a market.[11] Furthermore, the joint product nature of newspapers and the economies of scale enjoyed by large newspapers make such markets battlefields where the newspapers are struggling for their very survival.[12] Instead of collusive behavior, one would expect these newspapers to charge reasonable advertising and subscription prices, compete for news coverage, and generally act independently of each other. Under such behavior, the community gains because there is more than one major voice in the media marketplace.

The suburban press also appears to gain because minimal barriers exist to the entry of other newspapers into the area. This occurs for two reasons: (1) From the standpoint of advertising, if the dailies are charging reasonable prices for advertising space there are unallocated funds that can be spent on advertising in the suburban press; (2) From the standpoint of circulation, competing newspapers do not have the excess profits that could be allocated for the additional staff needed to cover suburban news as well or better than the suburban newspapers.

Joint Operating Agreement Structure

Located somewhere between the competitive and monopoly daily

newspaper markets are the metropolitan areas with joint operating agreements. The joined papers most nearly approximate oligopolies since they openly engage in agreements on advertising and subscriptions prices. However, they retain independent news and editorial staffs, making them competitive in providing information to readers.

From an economic standpoint, the major difference to suburban papers between competitive and joined newspaper markets is the financial power wielded by the joined papers. Joined papers gain financial power, and possibly the ability to erect barriers to entry, from two sources. First, by combining their production and business they enjoy economies of scale that allow them to produce newspapers at a cost per unit far below that possible by smaller newspapers.[13] Second, they may set advertising rates high enough to siphon off the majority of advertising funds available in the community and thereby leave less for suburban newspapers.[14] The resulting funds can be used to undercut subscription prices of competitors or to fund staff increases and zoned editions designed to compete for news with the suburban newspapers. A counter argument is that the combination rates charged by JOA newspapers may result in a lower total costs to advertisers than what they had to pay two separately owned papers.

Monopoly Market Structure

Under the classic economic definition of monopoly, a single firm has complete control of a market and is therefore able to wring excess profits from the market if it so chooses.[15] In the days before radio and television, it may have been possible to

wield absolute media power in a community, but today intermedia and intracity newspaper competition make this impossible. In areas where the so-called monopoly paper is well established, however, there are undoubtedly barriers to entry for other newspapers. For example, there is evidence that monopoly dailies tend to constrain circulation to geographic areas where profit will be maximized, thereby obtaining excess profits that enable the paper to exert its financial muscle whenever it might feel threatened by the intrusion of a direct competitor.[16]

LITERATURE REVIEW

Few empirical studies have dealt directly with the effects of the central market structure of the metropolitan area central city on the suburban press. And of the studies that have been reported, none has addressed the issue in all three types of market structure--competing dailies, joined dailies and monopoly dailies--or employed a sample comprehensive enough to generalize much beyond a limited population.

In the most circumscribed of the studies reported, Henderson examined the effects of the Seattle joint operating agreement on the four suburban dailies publishing in the community's city zone.[17] Results showed that the suburban dailies did experience losses in advertising lineage, especially local display advertising, but the losses were consistent with trends at other newspapers in the Pacific Northwest. Apparently direct mail advertising was viewed by editors as a more serious problem than was the joint operating agreement. Further, editors for all four suburban dailies said that both circulation and profits were higher following initiation of the joint agreement. In fact they

said that the JOA had served an an impetus to improve their operation.

Another study examined the trends in the number and circulation of suburban newspapers in metropolitan areas where the central city market went from competitive to monopoly following the demise of one of the competing dailies. Results showed that the number of suburban newspapers did not change significantly but that suburban circulation did suffer under the monopoly structure.[18]

A third study compared the effects of central city dailies in competition and central city dailies in joint operating agreements on suburban newspaper circulation and numbers. In the study, which matched six metropolitan areas representing the two different market structures, Niebauer found no significant differences in the number of newspapers per suburb under the two structures.[19] However, he did find that mean circulation per suburb was more than twice as high in the metropolitan areas with joint operating agreements than it was in areas with competing dailies.

Lacy took a more regional look at the effects of market structure on suburban papers in the Southwest by comparing five Standard Metropolitan Statistical Areas having central city monopoly dailies with SMSAs having competitive central city dailies. He determined the degree of competitive pressure exerted on the suburban newspapers by the dailies by asking suburban editors to estimate the percentage increase in advertising revenues and circulation they would expect if there was no competition from the dailies. Results showed that

monopoly dailies apparently provided suburban papers with more competition for circulation than did competing dailies but that competing dailies provided more competition for advertising than did monopoly dailies.[20]

A recent study of what happens to advertising when a metropolitan market becomes a monopoly showed that advertisers tend to move to other newspapers. Between 13 and 20 percent of the advertisers in the three markets studied said they moved advertising to suburban newspapers.[21]

It is evident from the complex and incomplete results in the studies cited that there is a need for more comprehensive studies to clarify the effects of central city market structure on suburban newspaper circulation and existence, and on advertising revenues in suburban newspapers. The present study sought to add insight only into the first of the effects--the effect of market structure on suburban newspaper circulation and existence. Therefore, the following research questions were investigated:

1. Does the structure of the central city newspaper market influence the existence of a weekly or bi-weekly newspaper in a suburb?
2. Does the structure of the central city newspaper market influence the existence of a daily newspaper in a suburb?
3. Does the structure of the central city newspaper market influence the circulation of weekly, bi-weekly or daily newspapers in suburban markets?

METHOD

The sample for the study included 900 suburban communities, 300 randomly selected from metropolitan areas representing each

of the three different central market structures.[22] Suburbs were selected from the 21 standard metropolitan statistical areas with joint operating agreements, 27 of the 29 SMSAs with two or more separately owned and operated newspapers, and 25 cities from the 100 largest SMSAs with central city monopoly dailies.[23] Market structure was determined from the 1986 Editor & Publisher International Yearbook.[24]

The dependent variables were whether a weekly or daily newspaper existed within the suburban area and the circulation of such newspapers as indicated in the 1986 Editor & Publisher International Yearbook. Weekly newspapers' circulations also were broken down by paid and free.

Data were also gathered for additional variables that might influence the circulation and existence of suburban newspapers. These included population of the suburban area, distance of the suburb from the central city, number of suburbs in the SMSA, number of households in the SMSA, and average daily circulation of the large metropolitan dailies in the SMSA.[25] These were introduced into the statistical analysis as control variables.

The population of the suburb was used because it represents the market size of the suburb. Population was used in lieu of the number of households because the former was available for all areas, while the latter was available only for incorporated areas. Distance from the central city was included because previous studies have indicated it may be related to the degree of competition.[26]

The number of suburbs in the SMSA was included because the municipal divisions of the SMSA may affect the number and size of

suburban newspapers. For example, few large suburbs would tend to generate a few large dailies instead of many small weeklies. Larger dailies in the suburb could possibly create barriers to entry by smaller newspapers because financial well-being of newspapers is related to amount of circulation and advertising.

The number of households in the SMSA was used because it indicates the overall circulation potential of the newspaper markets in the SMSA. The average daily circulation of the central city daily, or dailies, was used to represent the extent of competition in the market from larger dailies.[87] The circulation also represents the economic strength of these dailies because advertising is correlated with circulation in most cases and circulation itself often represents the economic strength of the newspaper. Circulation is also correlated with the commitment of resources to the editorial product.[88]

Regression analysis was used to evaluate the impact of central market structure on suburban newspaper circulation. Discriminant function analysis was used to test the hypothesis about the existence of weeklies and dailies in the suburban areas. Central market structure was treated as a dummy variable. Since 98 percent of the cities in the country have monopoly markets,[89] the effects of a market having a JOA or oligopoly was examined in the regression equation and discriminant functions.

RESULTS

Does the newspaper market structure of a central city influence the existence of suburban newspapers, either weeklies, bi-weeklies or dailies? For suburban weeklies and bi-weeklies, the answer appears to be "no."

The discriminant analysis in Table 1 shows the presence of competition, the presence of a joint operating agreement, and the total average daily circulation of daily newspapers in the central city contribute very little to the overall predictive power of the discriminant function, a function whose explanatory power is itself small (13.5 percent of total variance).

The three variables, however, appear to be statistically significant in univariate F-tests. This fact, and the lack of contribution of these three variables to the overall function, led the researchers to infer some overlap of variance with another variable. In fact, some correlation exists between the number of households in the SMSA and the presence of competition ($r=.61$) and average total daily circulation in the central city ($r=.60$). The independent variable that makes the greatest contribution to the discriminant function is the population of the suburb where the weekly or bi-weekly is located.

The newspaper market structure in the central city also does not influence the existence of suburban dailies. The discriminant function in Table 2 used to predict suburban dailies is more powerful than the one predicting non-dailies (17 percent of total variance), but again neither the presence of competition nor the presence of a JOA contribute to the predictive power. And in this function, neither is statistically significant at the univariate level.

Population of the suburb where the daily is located is again the major contributor to the function. That is, the larger the population of the suburb, the more likely that a suburban daily will exist. The same holds true for the number of households in

the SMSA and the distance between the suburban daily's suburb and the central city. For daily newspapers in the SMSA central city, the larger the total average daily circulation of the daily in the SMSA's central city, the less likely that there will be a suburban daily. These latter three variables, though significant at the univariate level, make only minor contributions to the predictive power of the discriminant function.

The influence of market structure on the circulation of suburban newspapers is either non-existent or small, based on the regression equations in Table 3. Regression analyses show only one instance when market structure influenced suburban circulation: Paid circulation of weekly newspapers is likely to be greater with the presence of competition in the central city. But the presence of competition accounts for less than one percent of the variance in a regression equation that explains 7.5 percent of the variance in paid circulation of weeklies.

Again, the major contributor to circulation of suburban newspapers--weeklies and dailies--is the population of the suburban area. The population where the suburban paper was located accounted for no less than 85 percent of the explained variance in any of the four regression equations and as much as 95 percent.

DISCUSSION

Based on the previous analysis, the newspaper market structure of the central city does not extensively influence either the existence of suburban newspapers or their circulation. Only one of the analyses showed a statistical relationship between the central city market structure and the newspapers in

the suburbs. Competitive central markets were positively related to suburban weekly paid circulation. Although the amount of variance explained by this relationship was small, it is consistent with the findings that showed editors and publishers of suburban dailies and weeklies in competitive central markets perceived less circulation competition than did their counterparts in monopoly central markets.[30] In terms of presence and circulation, the central city market structure--in and of itself--does not create a barrier to entry or existence for suburban newspapers. The analyses say nothing, however, about the effects of central market structure on suburban newspapers' abilities to attract advertising and establish competitive rates.

In every instance population of the suburb was important to both the existence and circulation of suburban newspapers. This result is consistent with the findings of Stone, Stone and Trotter that in 124 cities circulation was highly correlated with number of city zone households.[31] Ultimately, then, an important factor in determining the success of a suburban newspaper would be the suburb's population, an indicator of demand. This does not mean a large suburban population can prevent a suburban newspaper from going out of business or guarantee the successful start-up of a suburban daily or weekly. Nor is the potential for demand (measured in population) assurance that advertisers will find a suburban newspaper an attractive vehicle. Suburban population is important only in terms of potential until some person or company takes the risk of starting a newspaper. This entrepreneural talent may be an important factor in determining the existence and success of a suburban newspaper.

Even suburban population and entrepreneural talent may not explain most of the variance that is associated with existence of a newspaper in a suburb. Another important factor may be the policy of the central city newspaper managements toward the suburbs. Regardless of the type of central market structure, large metropolitan newspapers can exert a great deal of competitive pressure on a suburban paper if the managers choose to do so. An additional factor may be advertising demand. If a suburb has few advertisers or the advertisers in a suburb are not interested in the residents of that suburb, a newspaper will probably not survive.

Whatever the factors contributing to umbrella competition, it is important that they continue to be examined. The decline of intracity competition and the growth of suburbs most likely will continue through the end of this century, making the suburbs the area where newspapers will battle for circulation and advertising. This economic competition can result in changes in content,[22] which in turn can affect the information and ideas that are a crucial part of the American system of government. Without understanding the processes in this competition, public policy to help perpetuate the competition will be impossible.

ENDNOTES

[1] V. M. Mishra, "The Future of the Newspaper Industry in America: Some Research Contingencies and Portents," Gazette, 26:16-29 (1980).

[2] This estimate is based on the results of this study.

[3] John Morton, "Hitting the Market," Washington Journalism Review, p. 15 (July/August 1983).

[4] James N. Rosse, "Economic Limits of Press Responsibility," discussion paper, Stanford University: Studies in Industry Economics, No. 56, 1975.

[5] Stephen Lacy, "The Effects of Ownership and Competition on Daily Newspaper Content," doctoral dissertation, University of Texas at Austin, 1986.

[6] Stephen Lacy, "Competition Among Metropolitan Daily, Small Daily and Weekly Newspapers," Journalism Quarterly, 61:640-644, 742 (Autumn 1984).

[7] Donald S. Watson, Price Theory and Its Uses (Boston: Houghton-Mifflin, 1968) pp. 116-117.

[8] The competitive markets are not competitive in the sense used with theories of perfect competition, which assume many sellers. However, these markets are competitive in the sense that they have two separately owned and operated firms vying for the same advertisers and readers. The monopoly markets are not monopolies in the sense that these newspapers have no substitutes, but the only newspaper within a city does have a great deal of discretionary power to set prices. See Bruce M. Owen, Economics and Freedom of Expression, (Cambridge, Mass.: Ballinger Publishing, 1975), p 4.

[9] Michael Wowk and Robert Ankeny, "Filing Draws Mixed Reviews from Observers," The Detroit News, May 10, 1986, p. 10A.

[10] Richard Caves, American Industry: Structure, Conduct, Performance, 5th ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1982), pp. 52-53.

[11] Walter E. Niebauer Jr., "Trends of Circulation and Penetration Following Failure of a Metropolitan Daily Newspaper," paper presented to the Association for Education in Journalism and Mass Communication, San Antonio, August 1987.

[12] See James N. Rosse, "The Decline of Direct Newspaper Competition," Journal of Communication 30:65-71 (1980) and Owen, op. cit.

[13] Owen, op. cit., p. 35-36.

[14] Bonnie Lynn Henderson, "Impact of the Seattle Joint Operating Agreement on the Local Suburban Press," master's thesis, University of Oregon, 1983, p. 11.

[15] Owen, op. cit., p. 28.

[16] William B. Blankenburg, "Newspaper Ownership and Control of Circulation to Increase Profits," Journalism Quarterly 59:390-398 (Autumn 1982).

[17] Henderson, op. cit.

[18] Niebauer, op. cit.

[19] Walter E. Niebauer Jr., "Effects of the Newspaper Preservation Act on the Suburban Press," Newspaper Research Journal, 5:41-49 (Summer 1984).

[20] Stephen Lacy, "Monopoly Metropolitan Dailies and Inter-City Competition," Journalism Quarterly 62:640-644 (Autumn 1985).

[21] Mary Alice Sentman, "When the Newspaper Closes: A Case Study of What Advertisers Do," Journalism Quarterly, 63:757-762 (Winter 1986).

[22] The suburban areas were identified using the Rand McNally Sales and Marketing Atlas (Chicago: Rand McNally and Co., 1984). A suburb was any incorporated or unincorporated area within the standard metropolitan statistical area as defined by the Census Bureau. If the central city was not in an SMSA, the county was used as the basis for defining suburbs. All towns and cities in the county other than the central city being examined were considered suburbs. The consolidated SMSA was used if a chain of contiguous suburbs connected the main SMSA with peripheral SMSAs. Only the peripheral SMSAs that were connected were included. Military bases were not counted as suburbs. Both incorporated and unincorporated areas were used because some unincorporated areas have large populations and newspapers. The final sample actually included 301 suburbs from JOA SMSAs and 300 from competitive and monopoly SMSAs.

[23] Two cities with competition, Laredo, Texas, and Dothan, Alabama, were overlooked by the authors in selecting the sample. Five other markets were not included in the study because the few suburbs surrounding these markets were not named in the random selection process. The 25 monopoly markets were randomly selected from the 100 largest monopoly markets based on number of households.

[24] 1986 Editor & Publisher International Yearbook, (New York: Editor & Publisher Co., 1986).

[25] Population of the suburban area was taken from the Rand

McNally Sales and Marketing Atlas, op. cit. Distance was determined by measuring the distance from the center of the central city to the suburban area on maps in the Rand McNally Commercial Atlas and Marketing Guide, 116th ed. (Chicago Rand McNally and Co., 1985). Number of suburbs in the SMSA was also taken from Rand McNally Sales and Marketing Atlas. The number of households in the SMSA came from Newspaper Circulation Analysis 1984/1985 (Standard Rate and Data Service, Wilmette, Ill.: 1984). The consumer market data in this publication was provided by National Decision Systems in Encinitas, California. The circulation figures came from 1986 Editor & Publisher International Yearbook, op. cit.

[26] Stephen Lacy, "Competition Among Metropolitan Daily, Small Daily and Weekly Newspapers in the Southwest," paper presented to the Southwest Symposium for Journalism/Mass Communication, Austin, Texas, October 1983; and Stephen Lacy, "The Influence of Intercity Newspaper Competition on Daily Newspaper Content," paper presented to the Association for Education in Journalism and Mass Communication, San Antonio, August 1987.

[27] This was combined average daily circulation for both papers in a JOA or competitive market. This combined figure would better represent the amount of competition a suburban newspaper faced.

[28] Stephen Lacy, "The Effects of Intracity Competition on Daily Newspaper Content," Journalism Quarterly (Scheduled for Autumn 1987 publication).

[29] Madelyn A. Ross, "Here's How Newsrooms Can Cope with Corporate Journalism," ASNE Bulletin, December 1986, pp. 4-7.

[30] Lacy, op. cit., 1985.

[31] Gerald C. Stone, Donna B. Stone and Edgar P. Trotter, "Newspaper Quality's Relation to Circulation," Newspaper Research Journal, 2:3:16-24 (Spring 1981).

[32] Lacy, "The Influence of Intercity Newspaper Competition on Daily Newspaper Content," op. cit.

TABLE 1

Impact of Central City Market Structure on the Existence of Weekly or Bi-Weekly Newspapers in Suburban Markets

Discriminant Analysis Results

Independent Variable	Standardized Coefficient
Population of suburb in which non-daily is located	1.049[c]
Presence of a daily in suburb in which weekly is located	- .401
Distance of suburb in which non-daily is located from central city	.354
Number of suburbs in SMSA	- .341
Number of households in SMSA	.179
Presence of two separately owned and operated dailies in central city of SMSA	.140[b]
Total average daily circulation dailies in the SMSA central city	- .132[a]
Presence of JOA in SMSA central city	- .057[a]

Wilks Lambda = .865

Squared canonical correlation = .135

Eigenvalue = .156

X^2 = 129.49 for discriminant function (significant at $p < .001$)

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[a] Univariate F-ratio significant at $p < .05$ level
[b] Univariate F-ratio significant at $p < .01$ level
[c] Univariate F-ratio significant at $p < .001$ level.

TABLE 2

Impact of Central City Market Structure on the Existence of Daily Newspapers in Suburban Markets

Discriminant Analysis Results

Independent Variable	Standardized Coefficient
Population of suburb in which non-daily is located	1.003[b]
Total average daily circulation dailies in the SMSA central city	- .515[a]
Number of households in SMSA	.373[b]
Distance of suburb in which non-daily is located from central city	.342[a]
Presence of two separately owned and operated dailies in central city of SMSA	- .201
Number of suburbs in SMSA	.161
Presence of JOA in SMSA central city	- .135

Wilks Lambda = .829

Squared canonical correlation = .170

Eigenvalue = .206

X^2 = 167.42 for discriminant function (significant at $p < .001$)

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[a] Univariate F-ratio significant at $p < .05$ level
[b] Univariate F-ratio significant at $p < .001$ level

TABLE 3

Regression of Market Structure and Control Variables on Circulation of Suburban Newspapers

	Dependent Variables							
	Total Circulation of Weeklies		Paid Circulation of Weeklies		Free Circulation of Weeklies		Total Circulation of Dailies	
Independent Variables	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR^2
Presence of JOA in central city	-.02	.005	.05	.001	-.05	.004	-.06	.002
Number of suburbs in metro area	-.07	.002	-.06	.002	-.05	.004	.07	.001
Presence of daily in suburb	-.14[c]	.006	-.15[c]	.003	-.09[b]	.011	--	---
Presence of weekly in suburb	--	---	--	---	--	---	-.06	.002
Distance to metro daily	.02	.001	.10[b]	.006	-.03	.004	.08[a]	.003
Population of suburb where paper located	.50[c]	.199	.29[c]	.069	.44[c]	.148	.41[c]	.137
Presence of competition in central city	.01	.000	.12[b]	.008	-.06	.002	-.07	.005
Average daily circulation of central city papers	-.16[a]	.001	.03	.000	-.20[b]	.001	-.15[a]	.004
Households in SMSA	.17[a]	.004	-.04	.001	.22[b]	.007	.06	.001
Adjusted R^2	.210		.075		.174		.146	

N = 901

[a] Significant at the $p < .05$ level
[b] Significant at the $p < .01$ level
[c] Significant at the $p < .001$ level